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A FINANCIAL ANALYSIS OF THE ONTARIO UNIVERSITY SYSTEM — 1981

Ontario Council on University Affairs
December, 1981



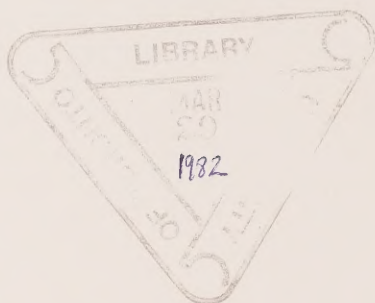
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UNIVERSITY SYSTEM - 1981

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Ontario Council on University Affairs
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INTRODUCTION

This paper updates and modifies some of the financial indicators found in Council's previous financial papers, which examined the degree of underfunding experienced by Ontario universities and its impact upon the system.

Since Council's funding advice was last accepted by Government in 1977-78, the universities have received annual operating grant increases of 5.8%, 5.1%, 7.2% and 10.1%. Other areas of Government expenditures have also received small funding increases in recent years. In a period of financial austerity, when the Government is attempting to control its expenditures in order to balance its budget, the constraints accompanying this policy might be expected to affect all Government functions and services. However, over the period in which Council's funding advice has not been accepted, the universities experienced funding rate increases consistently below that of overall Government budgetary expenditures. In fact, over these four years, annual university operating grant increases averaged 2.6% below the annual increases in Government budgetary expenditures (excluding debt servicing) which for the four years were 6.7%, 9.9%, 9.4% and 12.5%. At the same time, while the universities have received a declining share of Government expenditures, it appears that Government's expectations of the university system have not diminished.

Neither the increases in university funding nor Government expenditures generally have kept pace with inflation over the period 1978-79 to 1981-82. When deflated by the Consumer Price Index, university operating grants will have declined in real terms by 12% to 13% by the end of this four year period, while Government budgetary expenditures will have declined by 4% to 5%.

This paper begins by comparing, in Sections A and B respectively, the Ontario university system's Government support and total revenue with that found in other provincial university systems and in the Ontario elementary and secondary school system. Data presented in these sections indicate that the Government funding and revenue

positions of Ontario universities compare unfavourably with these other sectors of activity. The next section (Section C) points out that fluctuations in total enrolment, along with shifts in enrolment among disciplines, have made it difficult for Ontario universities to adjust to financial constraints.

The paper then goes on to examine the impact of these financial constraints on key components of expenditure in Ontario universities. Specifically, Section D examines the impact on faculty and staff resources and Sections E and F outline the effects on equipment, furniture expenditures and library acquisitions. These sections point out respectively that faculty and staff salaries have not kept pace with salaries in certain sectors of the economy and that expenditures on equipment, furniture and library acquisitions have declined substantially in real terms in recent years.

Section G indicates that provincial funding constraints on capital assistance have been even more restrictive than those for operating grants. Comparisons of the present allocative formula and hypothetical alternatives are presented in Section H. The effects on each institution of using a completely enrolment sensitive allocative formula, or moving to the other extreme - an enrolment insensitive formula, are examined. Finally, Section I provides a few comments on research funding, noting that there are some encouraging signs in this area.

(A) INTERPROVINCIAL COMPARISONS

In recent years, restraint in the growth of Government expenditures and in university funding have not been confined to Ontario. Restraint has been the declared policy of all provincial governments at one time or another during the past few years. Despite this apparent uniformity in declared fiscal policy, the application varies considerably, particularly with respect to university funding. As pointed out in System on the Brink (September 1979) and in A Financial Analysis of the Ontario University System - 1980 (September, 1980) the funding constraints faced by Ontario universities have been more stringent than those faced by universities in most other Canadian provinces. Revised and updated data confirm this observation.^{1.}

Table 1 of the Appendix provides some indication of the stringency in Government funding experienced by Ontario universities. The table presents the provincial operating grants per full-time equivalent (FTE) student for each province in Canada, along with the weighted average of the nine provinces excluding Ontario, for the period 1974-75 to 1979-80. Ontario declined in rank over this period from seventh to ninth, with only Nova Scotia being lower at the end of the period. Ontario's position, relative to other regions in Canada (Western provinces, Quebec and Atlantic provinces) and to the weighted average of the other nine provinces, is illustrated graphically in Figure 1. The figure indicates that, relative to the other provinces, Ontario's Government support, as measured in terms of operating grants per FTE student, was low at the beginning of the period examined and declined further in subsequent years.

The Ontario university system's comparatively low level of Government support has had a direct influence on the level of operating income in Ontario universities. Table 2 of the Appendix presents the total operating income per FTE student for each province over the same period, 1974-75 to 1979-80. It indicates that, over this period, Ontario dropped from sixth to ninth place among all provinces in total operating income per FTE student. As Figure 2 indicates, at the end of the period examined, in terms of operating

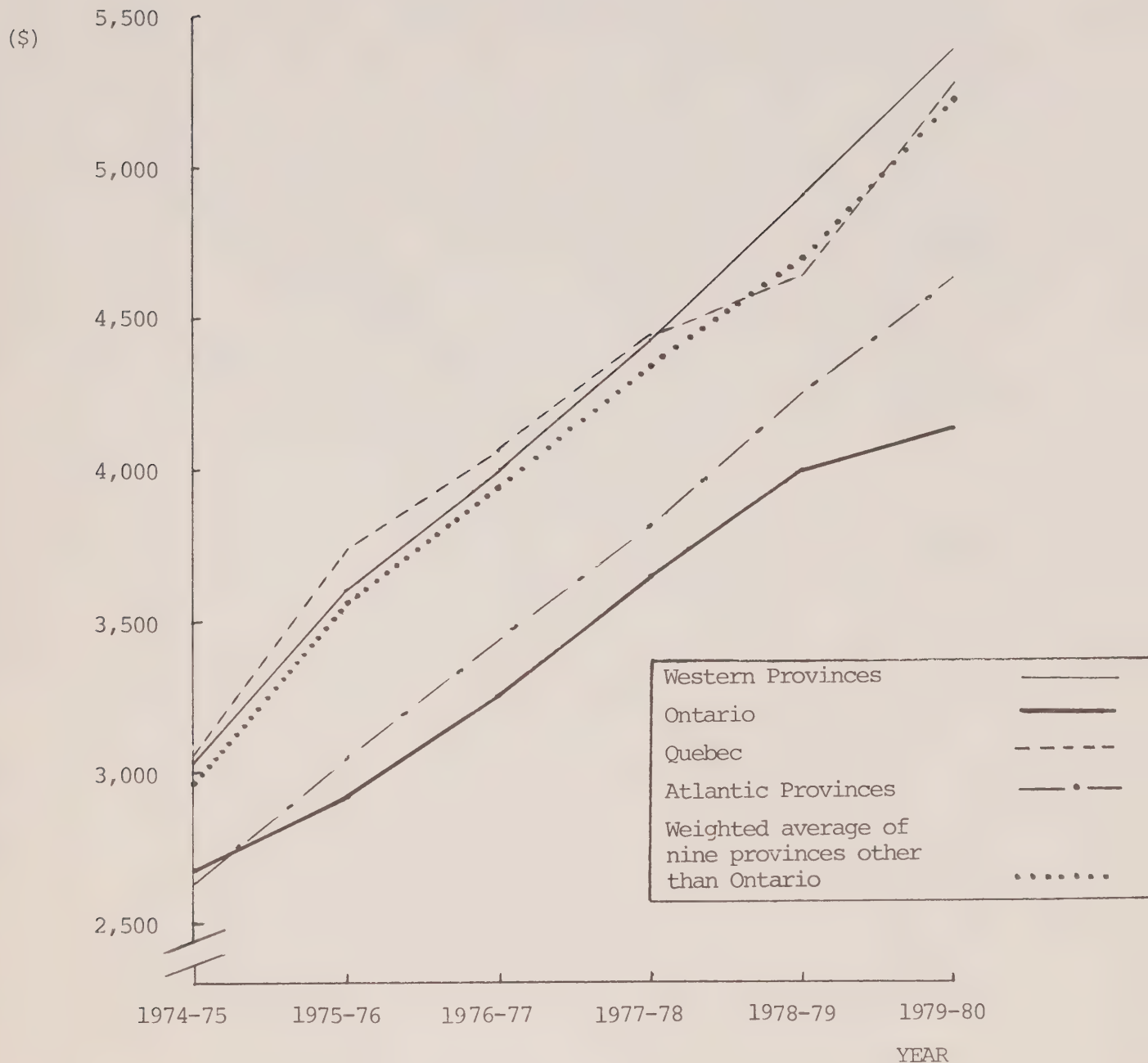
1. As has been the case in its previous financial papers, Council is again relying upon the Tripartite Committee on Interprovincial Comparisons for its data. The Committee's data base has been revised since last year, making it more accurate and the data more comparable among provinces. As a result, however, the data presented do not correspond precisely to those presented in previous years.

income per FTE student, Ontario universities were behind Quebec, the Western provinces, the Atlantic provinces and the weighted average of all provinces excluding Ontario.

More recent information suggests that, since 1979-80, the financial position of Ontario universities, relative to universities located in other provinces, has declined further. Table 3 of the Appendix documents the changes in Government grants, fees and enrolment for each province for 1980-81 and estimated for 1981-82. Over this two-year period, Ontario's grant increases are among the smallest percentage increases made available.

FIGURE 1

Interprovincial Comparison of University Grants:
Provincial Operating Grants per FTE Student,
1974-75 to 1979-80

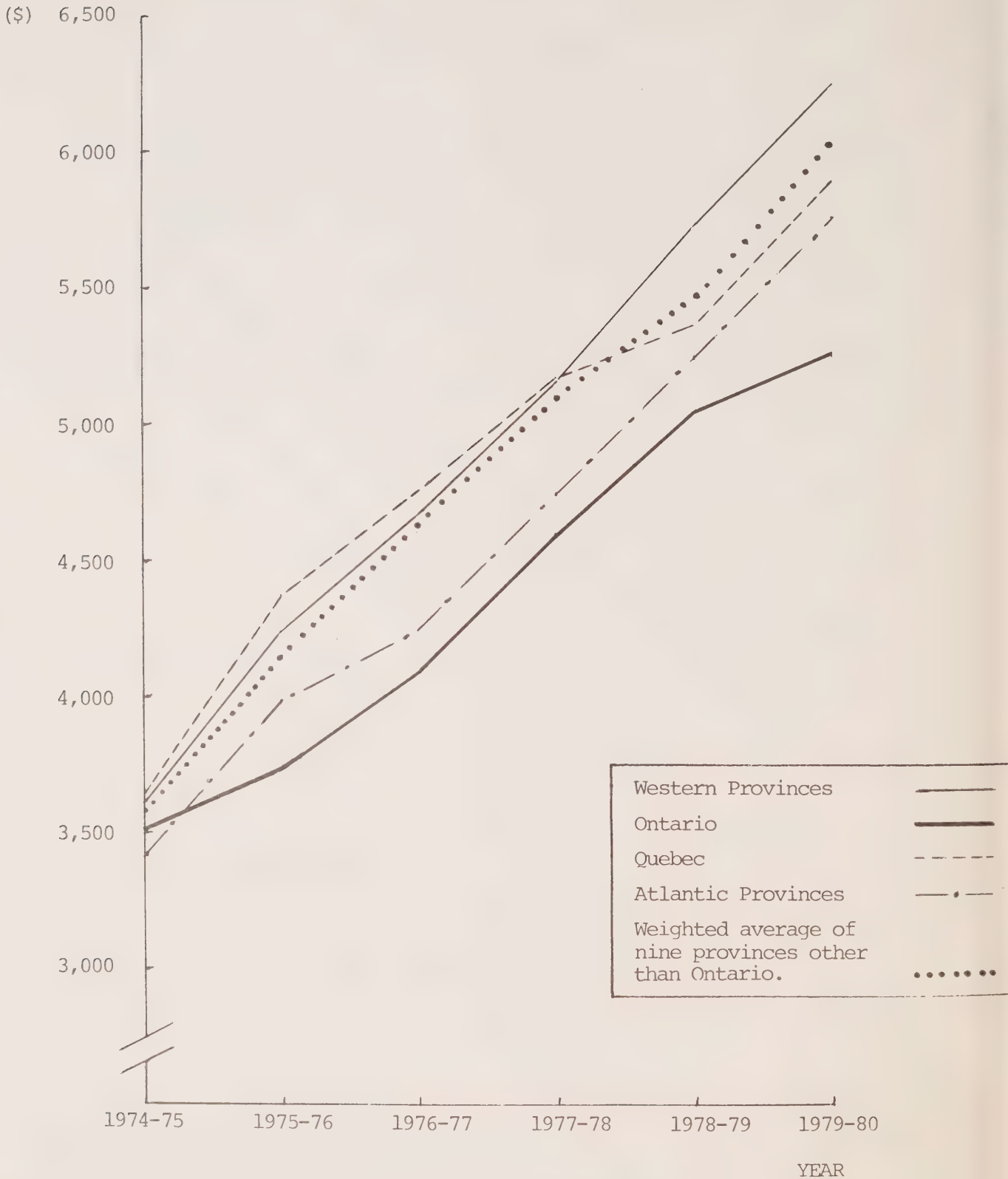


Note: In order for Ontario universities to have been funded at the same level of operating grants per FTE student as the weighted average of the other nine provinces in Canada in 1979-80, the Government of Ontario would have had to increase its operating grants by over \$197 million in that year alone.

Source: Table 1 of Appendix.

FIGURE 2

Interprovincial Comparison of University Revenue:
Total Operating Income per FTE Student, 1974-75 to 1979-80



Notes: In order for Ontario universities to have received the same level of operating income per FTE student as the weighted average of the other nine provinces in Canada in 1979-80, the operating income of Ontario universities would have had to be over \$136 million higher in that year alone.

Source: Table 2 of Appendix.

(B) INTRAPROVINCIAL COMPARISONS

The present analysis updates that undertaken in A Financial Analysis of the Ontario University System - 1980, which found that the level of provincial funding per student in Ontario elementary and secondary schools increased substantially in real terms between 1970-71 and 1979-80, while university funding per student declined during the same period. Table 4 of the Appendix, and Figure 3, present indexes of provincial grants per student for universities and for elementary and secondary schools, measured in constant 1970-71 dollars, over the period 1970-71 to 1980-81. The table shows that in 1980-81, university funding per student continued to decline, while elementary and secondary school funding continued to increase. Over the period, 1970-71 to 1980-81, university operating grants per FTE student declined in real terms by 16.8%, while provincial support per elementary and secondary school pupil increased 50.1% when the provincial contribution to the Teachers' Superannuation Fund² is included in provincial support and by 44.9% when this contribution is excluded.

University revenues per student have also declined in real terms since 1970-71, while elementary and secondary school revenues per student have increased. Table 5 of the Appendix, and Figure 4, present indexes of comparable university and elementary and secondary school revenues for the period 1970-71 to 1980-81. The university index uses provincial grants plus tuition fees as a proxy for university revenue, measuring, in constant 1970-71 dollars, the revenues per FTE student received by Ontario universities over this period. The index of elementary and secondary school revenues uses provincial grants plus local tax revenues as a proxy for total revenue. This index measures in real terms provincial grants plus local tax revenues per pupil received by Ontario elementary and secondary schools over the same period. According to these indexes, school revenue per pupil rose 40.4% in real terms between 1970-71 and 1980-81 when the

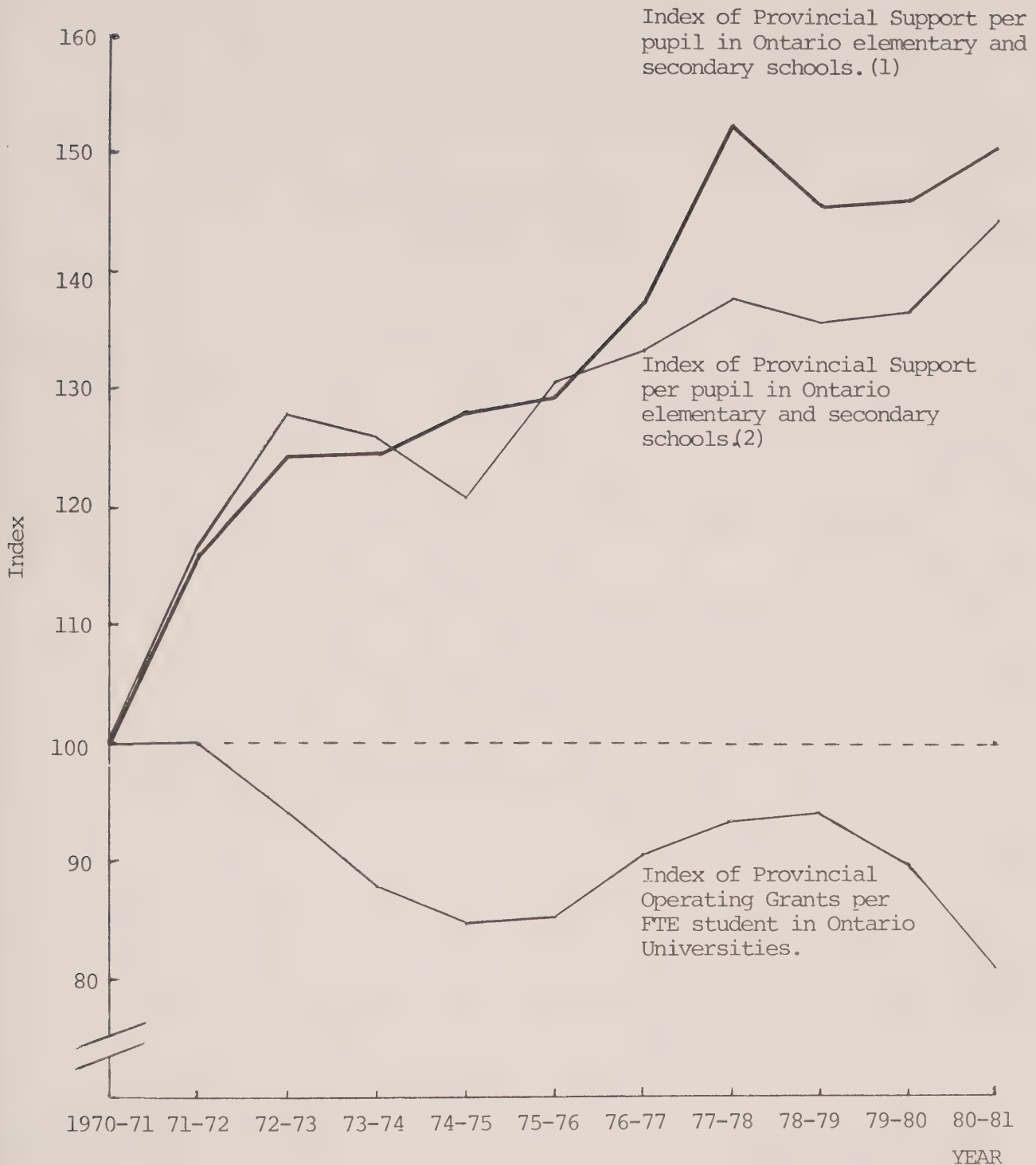
2. Whenever the provincial contribution to the Teachers' Superannuation Fund is mentioned in this paper, it includes the provincial contribution on behalf of teachers to the Superannuation Fund and Superannuation Adjustment Benefits.

provincial contribution to the Teachers' Superannuation Fund is included and by 37.3% when this contribution is excluded. This compares with a 18.2% decline in university revenue per student during the same period. These trends show no signs of changing. University system revenues per FTE student declined in real terms by 6.3% in 1980-81 over the previous year, while elementary and secondary school revenues per pupil increased by 1.7%.

It would be desirable to include comparable indexes of provincial support per FTE student and revenue per FTE student for the other major education sector in the province, the Colleges of Applied Arts and Technology (CAATs). However, it is not yet possible to compile what Council believes to be the most appropriate comparison data, operating grants allocated to post-secondary programs per FTE post-secondary student or operating revenue accruing to post-secondary programs per post-secondary student in the Colleges of Applied Arts and Technology. Information available on total revenue and Government support for all CAAT programs, including non-post-secondary, adult training and training in business and industry, suggests that on a per FTE student basis the CAATS have not fared well either in recent years.

FIGURE 3

Comparison of Provincial Support per Student in Universities
and in Elementary and Secondary Schools in Ontario, 1970-71
to 1980-81 (Constant 1970-71 dollars, 1970-71 = 100.0)



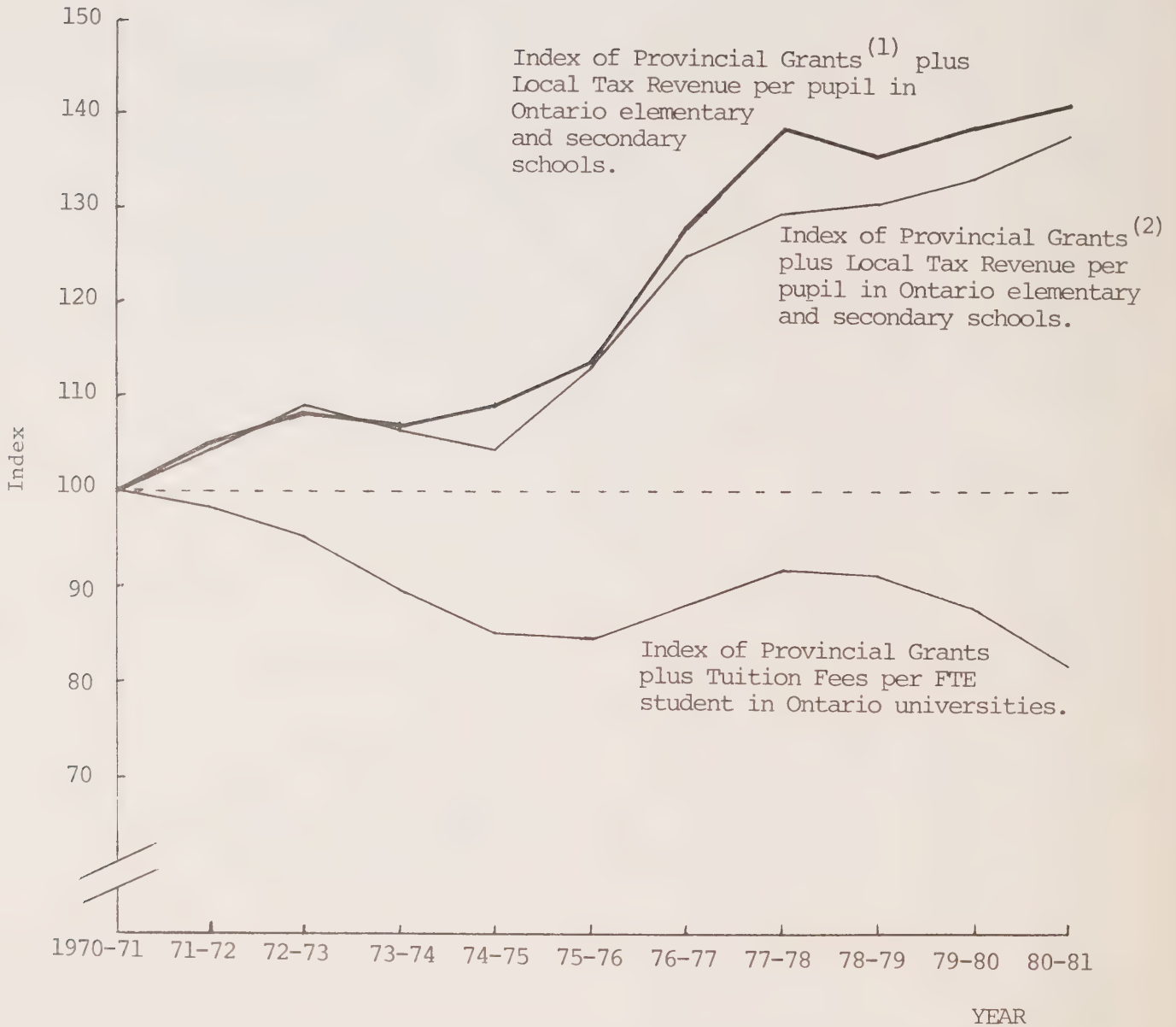
(1) Provincial grants to schools include the provincial contribution to the Teachers' Superannuation Fund.

(2) Provincial grants to schools exclude the provincial contribution to the Teachers' Superannuation Fund.

Source: Table 4 of Appendix.

FIGURE 4

Comparison of Revenue per Student in Universities and in
Elementary and Secondary Schools in Ontario,
1970-71 to 1980-81 (Constant \$ 1970-71, 1970-71 = 100.0)



(1) Provincial grants to schools include the provincial contribution to the Teachers' Superannuation Fund.

(2) Provincial grants to schools exclude the provincial contribution to the Teachers' Superannuation Fund.

Source: Table 5 of Appendix.

(C) ENROLMENT TRENDS

From 1970-71 to 1980-81, total university system FTE enrolment increased by over 30%. The enrolment changes experienced by the universities during this period did not, however, follow general demographic trends, which suggested annual increases until 1983. Enrolment did increase annually from 1970-71 until 1976-77, when it peaked at a level about 37% above the level found in 1970-71. In the following two years, however, enrolment declined unexpectedly by over 6%, but since then has increased annually and, in 1981-82, is expected to exceed the peak experienced in 1976-77. In 1980-81, there were 154,820 full-time students and 34,462 part-time FTE students enrolled in Ontario universities and their affiliated colleges, Ryerson Polytechnical Institute and Ontario Institute for Studies in Education, resulting in total FTE enrolment of 189,282.³ The final report of The Committee on the Future Role of Universities in Ontario points out that the 18 to 24 age group, from which Ontario universities currently draw 77% of their enrolment, will continue to increase in number until 1983. The report goes on to point out that, after declining in the late 1970s, the participation of this group in university education is rising again.

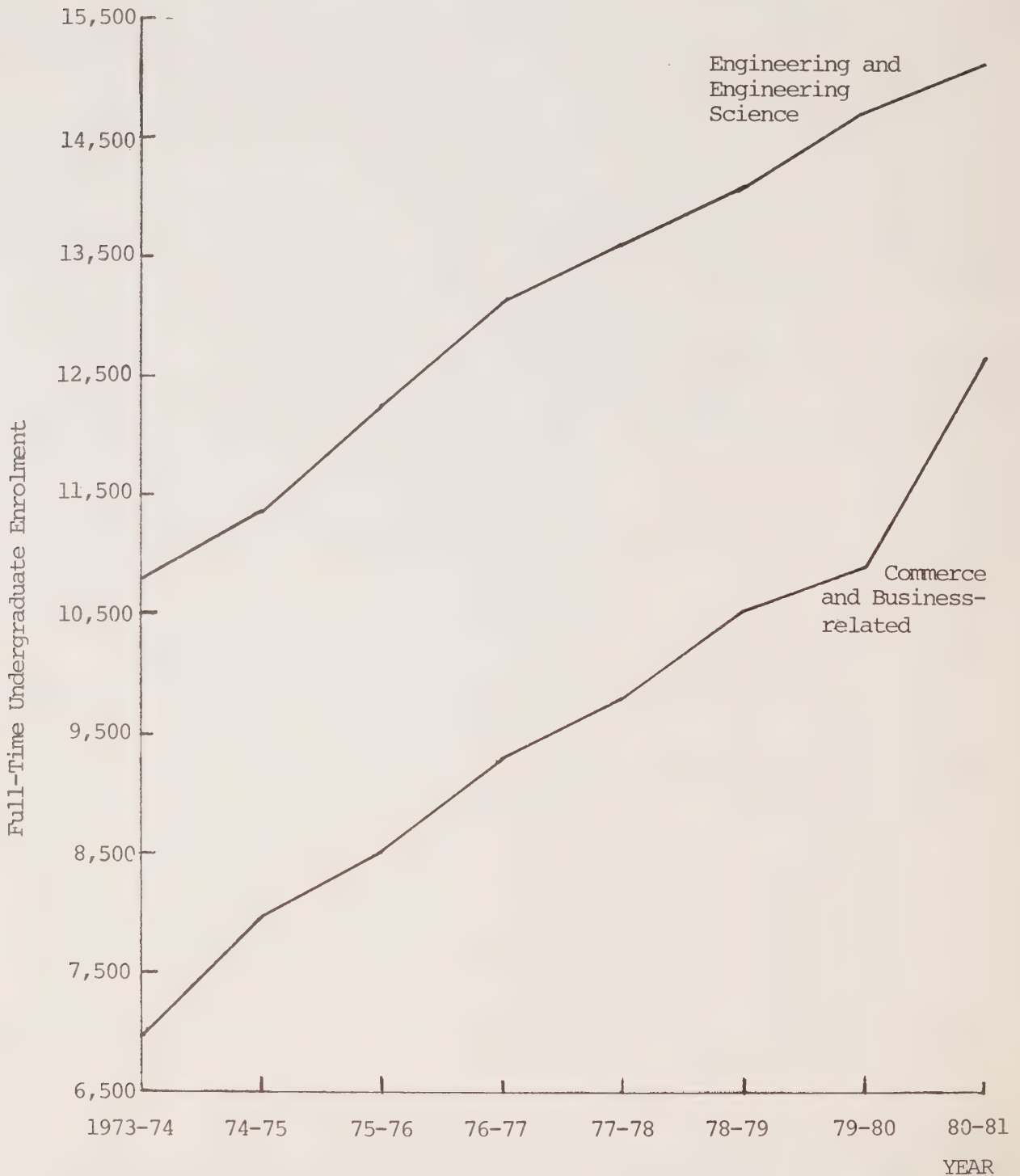
The unpredictable nature of these fluctuations in enrolment and in the participation rate in recent years has made it extremely difficult for universities to undertake the financial planning necessary to adjust to the financial constraints they have experienced. In addition to the fluctuations in total system enrolment, the universities have had to adjust to significant shifts in enrolment among disciplines in recent years. Such shifts in enrolment required reallocation of resources within each university in order to accommodate student demand. These shifts in enrolment along with recent increases in total enrolment have made it difficult for the institutions to cope with the financial constraints by reducing faculty and staff resources.

Figures 5 and 6 illustrate what has happened to full-time undergraduate enrolment in commerce, engineering and in total arts and science for the period 1973-74 to 1980-81. Over this period, full-time undergraduate enrolment increased by 81.5% in commerce and 39.7% in engineering. Full-time undergraduate arts and science enrolment increased substantially from 1973-74 to 1976-77, then declined for the next three years and increased again in 1980-81. This resulted

3. Ministry of Colleges and Universities, University Audit Reports: Financial Reports, March 27, 1981, pp. 10-13.

FIGURE 5

Total Full-Time Undergraduate Enrolment in Commerce and Business-related
and in Engineering and Engineering Science, 1973-74 to 1980-81

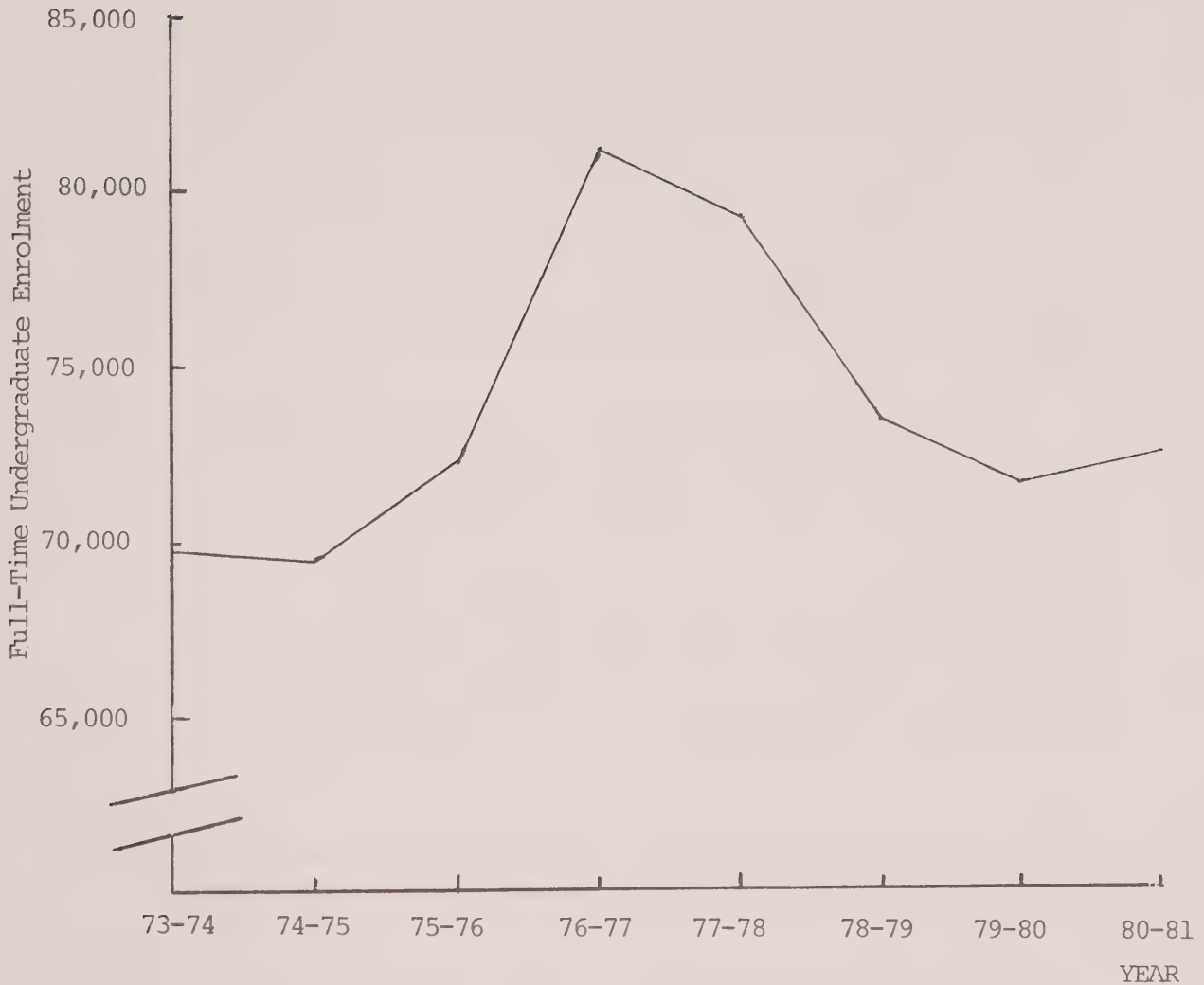


Note: Commerce and Business-related figures do not include Commerce at the University of Toronto. See footnote 5 of the text.

Source: Table 6 of Appendix.

FIGURE 6

Total Full-Time Undergraduate Enrolment in
Arts and Science, 1973-74 to 1980-81



Note: The discipline sectors included in the enrolment figures are: Humanities; Fine and Applied Arts; Social Sciences; Physical Sciences (excluding Computer Science for the years when separately identified); and Life Sciences, as roughly defined in Appendix "B" of System Rationalization. Figures are for the 15 provincially assisted universities and Ryerson.

Source: University Student Information System (USIS) 110100111.

in a 3.8% increase in enrolment over the entire period, 1973-74 to 1980-81. Table 6 of the Appendix provides a breakdown of the university system's undergraduate enrolment in major disciplines and discipline sectors for the same period.⁴ Full-time undergraduate enrolment increased, over the period identified, in all but two discipline sectors - humanities, and agriculture and biological sciences. Increases in full-time enrolment ranged from 13.6% in education to 45.3% in health professions and occupations. Over the same period, part-time undergraduate enrolment increased in all but one sector - general arts and science. Within some sectors, particular disciplines, such as commerce and engineering, experienced much larger full-time or part-time enrolment increases than the sector as a whole. Similarly, the drop in enrolment in some disciplines (such as zoology and history) exceeded that experienced by their sectors. Table 6 also indicates that over the period 1973-74 to 1980-81 there have been significant shifts in the share of total full-time or part-time undergraduate enrolment in particular sectors.⁵

Table 7 of the Appendix provides similar data on graduate enrolment. Unlike undergraduate student numbers, over the period 1973-74 to 1980-81, total full-time graduate enrolment declined. Significant enrolment declines occurred in humanities, health professions and occupations and in mathematics and physical sciences. The remaining sectors had full-time enrolment increases. Part-time enrolment increased in all but one sector - humanities. Surprisingly, disciplines such as zoology and anthropology, which experienced enrolment declines

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4. These data include enrolment at the provincially-assisted universities and their affiliated colleges, Ryerson Polytechnical Institute and the Ontario Institute for Studies in Education.
 5. Students enrolled in the University of Toronto's Faculty of Arts and Science are included under general arts and science in Table 5. The University of Toronto is unable to identify the disciplines in which these students are concentrating or majoring. However, the university has been able to provide Council with the number of full-course equivalents (FCEs) in each department of the Faculty of Arts and Science. These data appear to mirror the enrolment trends identified for the rest of the university system in Table 6 of the Appendix. For example, social science's share of total faculty course enrolments increased from 19.7% in 1973-74 to 25.1% in 1980-81, with commerce's share increasing from 3.4% to 6.9% during this period. On the other hand, humanities' share of total faculty FCEs declined from 38.1% in 1973-74 to 31.5% in 1980-81, while life sciences' share dropped from 13.6% to 10.1% over the same period.

at the undergraduate level, experienced enrolment increases at the graduate level. Finally, the shifts in the share of total enrolment in individual sectors, over the period identified, were more marked at the graduate level than at the undergraduate level.

(D) FACULTY AND STAFF RESOURCES

Data obtained from the Council of Ontario Universities (COU) on the size of faculty complement are found in Table 8 of the Appendix. The number of full-time equivalent faculty positions in Ontario universities declined by 216 or 1.6% over the period 1977-78 to 1980-81. However, in the final year of this period, the faculty complement increased by 6 over the previous year. Over the period, full-time tenure stream positions increased by 30 or 0.2% while full-time limited term positions declined by 121 or 7.4% and FTE part-time declined by 124 or 6.9%. Other data provided by COU suggests that the non-academic staff complement in Ontario universities declined by about 5% over the period 1977-78 to 1980-81.⁶

The Committee on the Future Role of Universities in Ontario pointed out in its final report that compensation levels for Ontario universities' faculty have fallen behind the levels in other related occupations in Canada. The Committee indicated that: "Between 1972-73 and 1979-80, salaries of Ontario university faculty increased by 72.2 per cent. Comparable figures for engineers and research scientists (external to the universities) are 93.2 per cent and 84.2 per cent respectively."⁷ Over the same period, the Consumer Price Index increased by about 85%.

According to Statistics Canada, in 1972-73, Ontario faculty had a higher mean salary than the other three major regions in Canada: the Western provinces, Quebec and the Atlantic provinces. However, by 1976-77, the mean salary of Ontario faculty had fallen below that of the Western provinces and Quebec. In the last year that consistent data were available, 1978-79, the mean salary of Ontario faculty was \$29,463 compared with \$30,120 for the Western provinces, \$32,683 for Quebec and \$24,723 for Atlantic provinces.

As Council noted in A Financial Analysis of the Ontario University System - 1980, the Conference Board in Canada's study Compensation in Canada: A Study of the Private and Public Sectors found that wages and salaries for non-academic positions in universities in 1978 were at the low end of the public and private sectors included in the study. There appears to have been no change in this situation.

6. Data were not available over the entire time period for Lakehead and York.

7. CFRUO, Report, August 1981, p. 40.

(E) EQUIPMENT AND FURNITURE EXPENDITURES

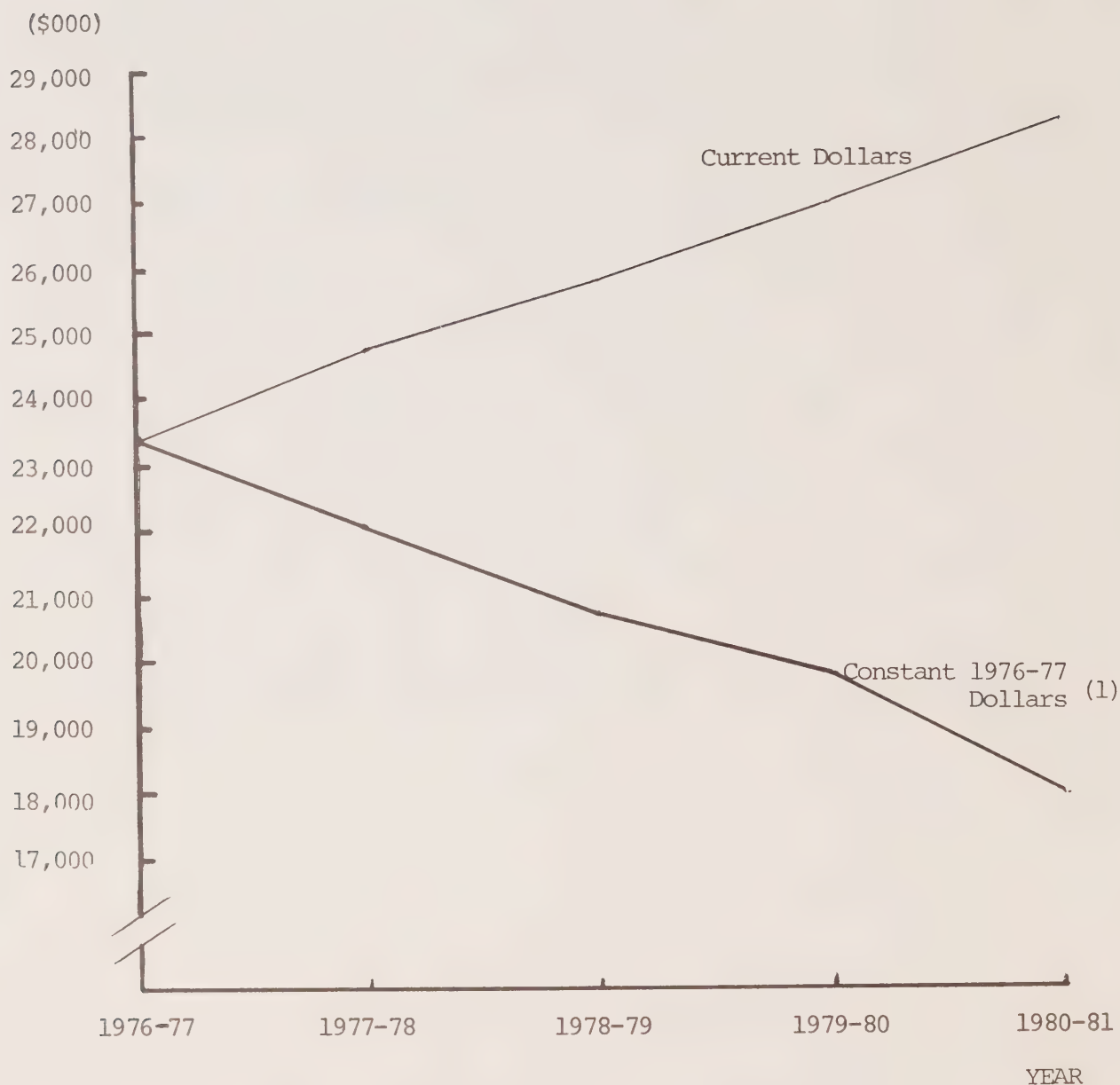
Council pointed out in A Financial Analysis of the Ontario University System - 1980 that in recent years the universities have responded to constraint by curtailing non-salary expenditures, such as those involving equipment and furniture. This trend continued in 1980-81. Table 9 of the Appendix contains data, for individual institutions and for the system as a whole, on the actual expenditures on equipment and furniture for the years 1976-77 to 1979-80 and the anticipated final expenditures on these items for 1980-81.⁸

Figure 7 is derived from Table 9 of the Appendix. It illustrates graphically what has happened to these expenditures on a system-wide basis, over the period 1976-77 to 1980-81, in both current and constant 1976-77 dollars. The constant dollar expenditures for 1977-78, 1978-79 and 1979-80 are deflated by the equipment and furniture component of the Ontario University Non-Salary Price Index (OUNSPI). Over the period 1976-77 to 1979-80 equipment and furniture expenditures increased by 12.4%, while the equipment and furniture component of OUNSPI increased by 36.7%, implying that the value of equipment and furniture declined significantly in real terms. The 1980-81 constant dollar figure shown in Table 9 of the Appendix was deflated by Council's estimate of the change in the total OUNSPI for that year. This figure indicates that equipment and furniture expenditures continue to decline in real terms.

8. It should be noted that over 80% of expenditures on equipment and furniture are devoted to equipment expenditures, including computer costs.

FIGURE 7

Equipment and Furniture Expenditures
from Operating Income,
1976-77 to 1980-81



(1) The 1977-78, 1978-79 and 1979-80 constant dollar figures were deflated by the equipment and furniture component of the Ontario University Non-Salary Price Index. The 1980-81 figure is deflated by Council's estimate of the change in the total OUNSPI for 1980-81.

Source: Table 9 of the Appendix.

(F) LIBRARY BOOKS AND PERIODICALS

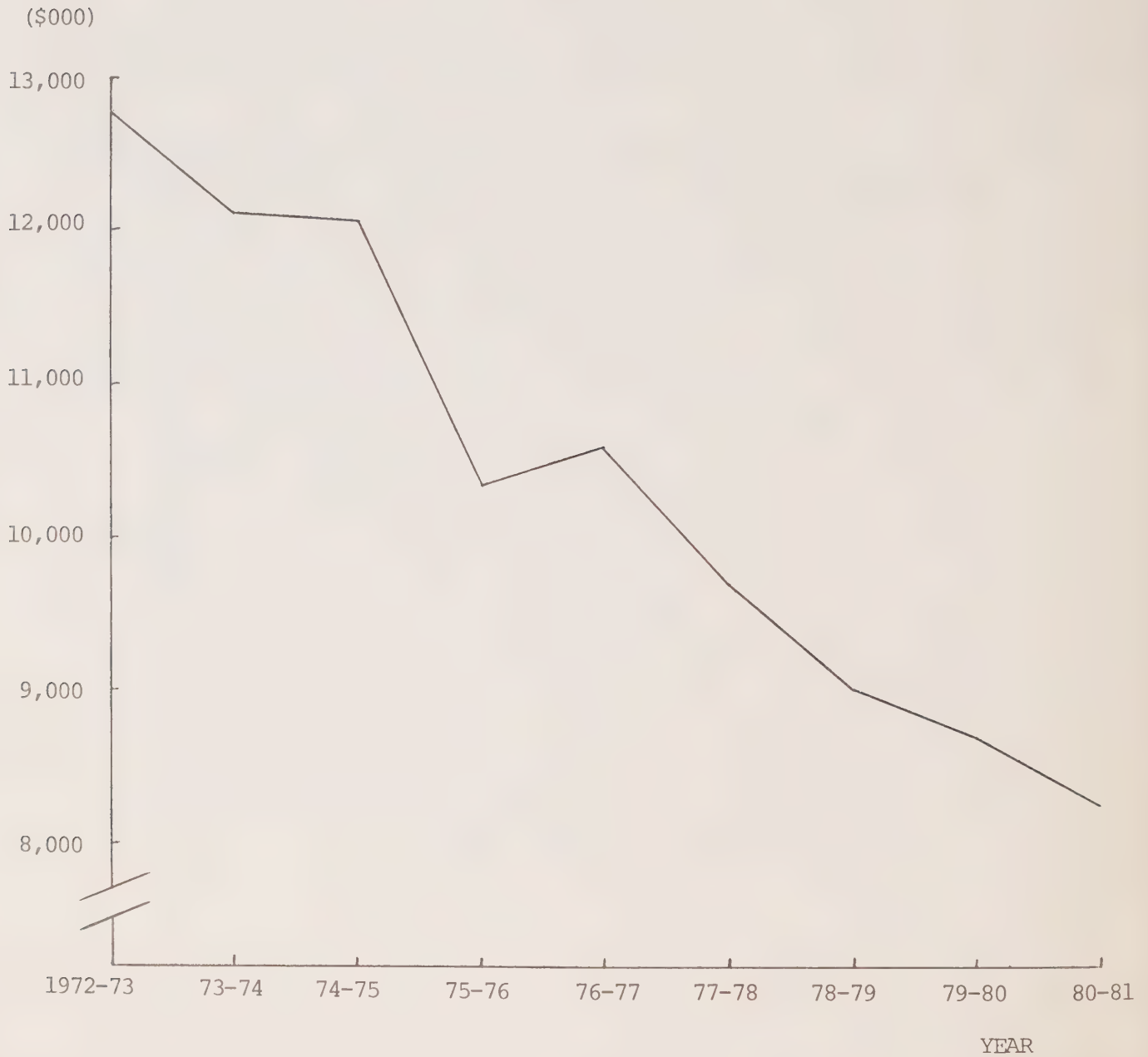
Another area of non-salary expenditures the universities have curtailed in recent years is the acquisition of library books and periodicals. Table 10 of the Appendix outlines the expenditures on library acquisitions for individual institutions and for the system, measured in constant 1972-73 dollars.⁹ Over the period 1972-73 to 1980-81, the total value of library acquisitions for Ontario universities declined by over 34% when measured in constant dollars. This decline is illustrated graphically in Figure 8.

It was pointed out in A Financial Analysis of the Ontario University System - 1980 that the decline in library acquisitions, since 1972-73, was attributable not only to the pressures of general financial constraints, but also to exceptional increases in the prices of books and periodicals. During the period 1972-73 to 1980-81, library acquisition expenditures increased by about 85%, while over the same period monograph and periodical prices increased by about 155% and 230% respectively. This resulted in a real decline in library expenditures of 35%. It appears that the institutions have dealt with the dramatic increase in the cost of maintaining periodical subscriptions by shifting more and more financial resources towards the acquisition of periodicals and away from the purchase of monographs. In 1972-73, Ontario universities allocated only 37% of their library acquisitions expenditures towards periodicals, with the remaining 63% being spent on book purchases. By 1979-80, Ontario institutions allocated 53% of their acquisitions expenditures towards the purchase of periodicals and only 47% towards the acquisition of monographs. Consequently, there has been a substantial reduction in the number of monographs acquired annually.

9. The price deflator used to calculate constant dollar values for 1972-73 to 1979-80 was the books and periodicals component of the Ontario University Non-Salary Price Index. The remaining year of data was deflated by a books and periodicals inflation estimate provided by Queen's University at Council's request.

FIGURE 8

Expenditures on Library Acquisitions from Operating Income,
1972-73 to 1980-81. (\$000 constant 1972-73)



Note: See footnote 9 of the text

Source: Table 10 of the Appendix.

(G) CAPITAL FUNDING

The Government of Ontario, over the decades, has made a major investment in the Ontario university system. The size of this investment is illustrated in Table 11 of the Appendix. This table indicates that over a billion dollars has been invested since 1944, through capital grants and debentures, and that over 80% of this investment occurred during the period 1964-65 to 1973-74 when the physical plant of the university system underwent a major expansion. Since that period, there has been little or no capital expansion and increasingly restricted capital funding for repairs, renovations and replacement projects.

In recent years, the constraints on capital funding have been even more severe than those imposed on operating support. Table 12 of the Appendix outlines the capital grants made available to the universities and Council's recommendations since 1976-77. In its advice to Government, Council has consistently selected a level of 1% of the replacement value of the space inventory of the universities as the minimum needed annually for new major repairs, renovations and replacement projects (excluding any amounts necessitated by carry-overs) in order to maintain the existing capital investment.¹⁰ As Table 12 indicates, Government funding for "new starts" of major repairs, renovations and replacement projects has fallen well short of the recommendations generated by this factor. For 1981-82, for example, Council recommended \$21.2 million be provided for these purposes, but only \$6.3 million have been made available by Government. Over the period in which Council has provided capital funding recommendations (1976-77 to 1981-82), Government support has fallen \$68.7 million short of Council's total recommendations.

Council's capital recommendations pertain to new major repairs, renovations and replacement projects. As Table 12 indicates, over the past few years, the majority of Government capital support has not been directed towards these projects. Instead, most Government capital support has been directed towards the continued funding (carry-over) of existing major repairs, renovations and replacement projects, carry-over cost of projects involving the construction of additional space, and support for new projects involving construction of additional space.

10. See Advisory Memorandum 77-IV for further information on Council's capital recommendations.

Table 12 shows that funding of these projects has also become restricted in recent years. In fact, for the past two years, total capital grants, which include grants for both new starts and carry-overs, have not even met Council's recommended allotment for new major repairs, renovations and replacement projects.

(H) ALLOCATIVE FORMULA

While the current financial difficulties faced by Ontario universities can be attributed directly to system underfunding, concern has been expressed to Council about the method of distribution of the limited funds available. Most of the Government operating support is allocated among the universities according to an enrolment related formula. Table 13 of the Appendix outlines the formula operating grants allocated annually by this formula to the universities and their affiliated colleges, Ryerson Polytechnical Institute, the Ontario Institute for Studies in Education and the Ontario College of Art, for the years 1977-78 to 1981-82. This table also lists the total formula operating grants received by each institution during the three year "base period", 1974-75 to 1976-77. Although the formula relies on enrolment as the means of determining the allocation of operating grants, the influence that any one year of enrolment has on the grant allocation has been reduced substantially. This has been brought about through the use of the three year moving average and base period enrolments in calculating the number of funding Basic Income Units (BIUs) for each institution.

Over the past few years, it has been suggested to Council that the operating grants formula in its present form is either too sensitive or, conversely, too insensitive to enrolment. Tables 14 and 15 of the Appendix attempt to provide comparisons of the existing allocative mechanism with two extremes: a completely enrolment driven mechanism based on "slip-year" enrolments, and a completely enrolment insensitive mechanism or "fixed-share" funding mechanism where, annually, each institution receives the same percentage increase in funding.

Table 14 illustrates, for the period 1977-78 to 1981-82, the effects of a "slip-year" or enrolment driven mechanism, documenting the differences between the actual formula grants allocated to each institution and the grants that would have been allocated if each institution had been funded according to the previous year's Basic Operating Income less formula fees. Table 15 illustrates, for the same period, the effects of a "fixed share" or enrolment insensitive funding mechanism, documenting the differences between actual formula grants allocated to each institution and the grants that would

have been allocated if the share of total formula grants accruing annually was fixed according to the institution's share of total formula grants during the funding base years (1974-75 to 1976-77).

Predictably, most institutions that would have been benefited under the enrolment driven formula would have lost funds under the fixed share funding scheme, or vice versa. For example, the University of Western Ontario would have gained an extra \$8.7 million under the fixed share or enrolment insensitive funding mechanism over the period examined. Under the "slip-year" or enrolment driven mechanism, Western would have received over \$3.5 million less than it actually received over this period. However, a few institutions would have either gained or lost under both hypothetical allocative mechanisms. The University of Toronto would have gained an extra \$2.7 million under the enrolment driven mechanism or an extra \$25.5 million under the enrolment insensitive mechanism. Alternatively, the University of Guelph would have lost \$3.8 million and \$0.8 million under the enrolment driven mechanism and enrolment insensitive mechanism, respectively.

It is not Council's intention to use these examples as an endorsement of the present allocative mechanism. They are merely examples of the effects of possible, although extreme, modifications to the allocative mechanism that have been suggested from time to time. However, it is interesting to note that, in contrast with the slip-year enrolment mechanism, the present allocative mechanism's provisions for buffering institutions' funding from the effects of wide fluctuations in enrolment appear to be reasonably effective, stabilizing funding from year to year.

(I) RESEARCH

In previous financial papers, Council expressed a number of concerns about the impact of underfunding on university research. These concerns remain, but they will not be reiterated at this time. However, some developments have occurred in the past year that should be noted.

The national granting agencies, the National Sciences and Engineering Research Council (NSERC), the Medical Research Council (MRC) and the Social Sciences and Humanities Research Council (SSHRC) received budget increases of 23.9%, 22.3% and 9.4% respectively for 1981-82. Since its inception in 1978, NSERC's budget has more than doubled to its present level of \$201.4 million. MRC's budget has grown to a level of \$100.2 million and SSHRC's budget now stands at \$45.6 million.

Council noted in A Financial Analysis of the Ontario University System - 1980 that NSERC had begun a program of University Research Fellowships aimed at expanding career opportunities in research in the natural sciences and engineering. This program has continued in 1981-82, with up to 75 new fellowships being granted at a value of \$25,800 each.

Council is encouraged by the Government of Ontario's planned initiatives to affect positively the research undertaken by government, business and industry, and the universities in the province. In Building Ontario in the 1980's, Government stated that under the Board of Industrial Leadership and Development (BILD) program "additional funding will be provided to purchase modern research equipment for engineering and science in Ontario universities." It also stated that "a research grant incentive program will be established to provide additional funds to university researchers receiving new or expanded research contracts from industry or government." Finally, Council notes that the IDEA Corporation (Innovation Development for Employment Advancement) will be asked to promote coordination of provincial research and development activities among the universities, industry and Government. In this regard, however, Council shares the concerns expressed by the Committee on the Future Role of Universities in Ontario that:

Independent initiatives on the part of the IDEA Corporation could risk distorting university missions.

OCUA should be informed of, and be free to comment on, the initiatives proposed by BILD or the IDEA Corporation which affect the universities so that such initiatives can be co-ordinated with the responsibilities of MCU and the advice of OCUA.¹¹.

11. CFRUO, Report, August 1981, p.33

SUMMARY

Since Council's advice was last accepted in 1977-78, the universities have received annual operating grant increases of 5.8%, 5.1%, 7.2% and 10.1%. Government budgetary expenditures (excluding debt servicing) experienced annual increases of 6.7%, 9.9%, 9.4% and 12.5% for the same four years, 1978-79 to 1981-82. These figures indicate that the universities have received a declining share of Government expenditures. When deflated by the Consumer Price Index, it is estimated that by the end of the period cited above, university operating grants will have declined in real terms by 12% to 13%, while Government budgetary expenditures will have declined by 4% to 5%.

When compared with universities in other provincial jurisdictions, Ontario universities fared poorly in terms of Government operating support and operating income. In 1974-75, Ontario ranked seventh in operating grants per FTE student and sixth in operating income per FTE student. By 1979-80, Ontario ranked ninth in both categories. In order for Ontario universities to have been funded at the same level of operating grants per FTE student as the weighted average of the other nine provinces in Canada in 1979-80, the Government of Ontario would have had to increase its operating grants by over \$197 million in that year alone. (Section A)

Government operating support and revenue received by Ontario universities has lagged behind that received by elementary and secondary schools in the province. Over the period 1970-71 to 1980-81, university operating grants per FTE student and university revenue per FTE student declined in real terms by 17% and 18% respectively. On the other hand, over the same period, elementary and secondary school support per pupil and elementary and secondary school revenue per pupil increased in real terms by 50% and 40% respectively, when the provincial contribution to the Teachers' Superannuation Fund is included and by 45% and 37% respectively, when it is excluded. (Section B)

The universities have experienced significant fluctuations in total enrolment and shifts in enrolment among disciplines in recent years. Full-time undergraduate enrolment in commerce and engineering, for example, has increased by 82% and 40% respectively, while full-time undergraduate humanities enrolment declined by 11%. The

shifts in enrolment among disciplines in particular, have curtailed the institutions' ability to respond effectively to the financial restrictions the universities have had to face in recent years by creating significant resource allocation problems. (Section C)

Salaries and wages of the faculty and staff of the universities have not kept pace with those in other sectors of the economy. The mean salary for faculty in Ontario universities has also lagged behind that of the Western provinces and Quebec. (Section D)

The universities have responded to the recent financial constraints by curtailing expenditures on non-salary items such as equipment and furniture and library book and periodical acquisitions. Over the period 1976-77 to 1980-81, equipment and furniture expenditures declined in real terms by about 23%. Over a longer period, 1972-73 to 1980-81, expenditures on library book and periodical acquisitions declined in real terms by about 35%. By the end of this period, only 47% of these expenditures were devoted to the purchase of monographs, compared with 63% at the beginning of the period. (Sections E and F)

In recent years, the constraints on capital funding have been even more severe than those imposed on operating support. Over the period in which Council has provided capital funding recommendations (1976-77 to 1981-82), Government support has fallen short of Council's total recommendations \$68.7 million. (Section G)

Although the present allocative mechanism relies on enrolment as the means of determining the allocation of operating grants, the influence of enrolment is modified by the averaging and discounting provisions found in the formula. Not surprisingly, some institutions would have gained if the grant allocation formula were more enrolment sensitive and others would have gained if the allocative mechanism were less enrolment sensitive. (Section H)

There have been some developments in the area of research funding in the past year. NSERC, MRC and SSHRC had budget increases of 23.9%, 22.3% and 9.4% respectively for 1981-82. Under the BILD program additional funding is expected to be available for the purchase of modern research equipment for engineering and sciences in Ontario universities. (Section I)

APPENDIX

TABLE 1

Interprovincial Comparison of University Grants:
Provincial Operating Grants per FTE Student, 1974-75 to 1979-80

	1974-75		1975-76		1976-77		1977-78		1978-79		1979-80	
	\$	Rank	\$	Rank	\$	Rank	\$	Rank	\$	Rank	\$	Rank
British Columbia	3,029	4	3,577	4	4,049	4	4,521	3	5,025	3	5,479	3
Alberta	3,345	1	4,053	1	4,358	1	4,797	1	5,358	2	5,830	2
Saskatchewan	2,977	5	3,410	5	3,767	5	4,107	5	4,590	5	5,096	5
Manitoba	2,594	8	3,016	6	3,453	6	3,874	7	4,123	7	4,677	7
Quebec	3,057	3	3,750	3	4,079	3	4,449	4	4,657	4	5,299	4
New Brunswick	2,704	6	3,003	7	3,445	7	3,905	6	4,364	6	4,762	6
Nova Scotia	2,431	9	2,836	9	3,233	9	3,497	9	3,819	9	4,074	10
P.E.I.	2,414	10	2,589	10	2,974	10	3,030	10	3,544	10	4,246	8
Newfoundland	3,079	2	3,809	2	4,157	2	4,625	2	5,485	1	5,994	1
Weighted average for 9 provinces other than Ontario	2,983		3,577		3,950		4,347		4,706		5,249	
Ontario	2,690	7	2,913	8	3,265	8	3,669	8	4,002	8	4,140	9
Canada	2,871		3,322		3,687		4,097		4,456		4,851	

Source: Third Report of the Tripartite Committee on Interprovincial Comparisons, December, 1981, p. 8.

Interprovincial Comparison of University Revenue:
Total Operating Income per FTE Student, 1974-75 to 1979-80

	1974-75		1975-76		1976-77		1977-78		1978-79		1979-80	
	\$	Rank	\$	Rank	\$	Rank	\$	Rank	\$	Rank	\$	Rank
British Columbia	3,682	4	4,312	4	4,871	2	5,344	3	5,886	3	6,241	3
Alberta	3,839	2	4,525	2	4,839	3	5,371	2	6,024	2	6,613	2
Saskatchewan	3,692	3	4,238	5	4,609	5	5,049	5	5,662	5	6,232	4
Manitoba	3,030	10	3,579	9	3,996	8	4,441	8	4,780	9	5,422	7
Quebec	3,643	5	4,373	3	4,743	4	5,165	4	5,347	4	5,890	5
New Brunswick	3,322	7	3,664	8	4,085	7	4,582	7	4,830	8	5,690	6
Nova Scotia	3,303	8	3,850	6	3,934	9	4,300	9	4,930	7	5,257	8
P.E.I.	3,219	9	3,360	10	3,394	10	3,256	10	4,418	10	4,973	10
Newfoundland	3,844	1	4,930	1	5,438	1	6,344	1	6,821	1	7,222	1
Weighted Average for 9 provinces other than Ontario	3,592		4,251		4,634		5,094		5,476		6,002	
Ontario	3,502	6	3,714	7	4,094	6	4,594	6	5,038	6	5,239	9
Canada	3,558		4,045		4,426		4,910		5,320		5,729	

Source: Third Report of the Tripartite Committee on Interprovincial Comparisons, December, 1981, p. 12.

TABLE 3

Interprovincial Comparisons, 1980-81 and 1981-82

	% Increase in Grants 1980-81	% Increase in Grants 1981-82	% Increase in Fee Rates 1980-81	% Increase in Fee Rates 1981-82	% Change in FTE Enrolment 1980-81	% Change in FTE Enrolment 1981-82
British Columbia	9.3	14.9	8.3-10.0	13.0-14.0%	3.0	5.8
Alberta	12.0	17.1	10.0	0.0	0.0	9.0
Saskatchewan	8.5	12.0	5.3- 8.3	7.0-10.0	2.4	8.0
Manitoba	8.3	13.8	7.9	8.9-10.5	1.9	4.0
Ontario	7.2	10.1	7.5-18.3 ⁽³⁾	10.0-21.0 ⁽³⁾	3.5	4.5
Quebec	13.9	6.7	0.0	0.0	2.8	2.5
New Brunswick	7.9	10.2	7.6	10.0-12.0	4.4	3.0 to 4.0
Nova Scotia	11.7	12.4	7.4	10.0-12.0	2.7	3.5
P.E.I.	7.9	9.7	9.5	10.0-12.0	-2.9	1.4
Newfoundland	10.0	8.9	0.0	10.0	0.4	N.A.

(1) Fee increases may differ among institutions and programs within institutions. When no range of increases is provided, the figure represents a rough average of fee increases across the province.

(2) Enrolment changes for 1981-82 are estimates.

(3) Comprised a formula fee rate increase of 7.5% in 1980-81 and 10.0% in 1981-82 and a discretionary fee rate increase of up to 10% of the formula fee rate.

TABLE 4

Comparison of Provincial Support per Student in University and in
Elementary and Secondary Schools in Ontario in Constant 1970-71
Dollars, 1970-71 = 100.00, 1970-71 to 1980-81

	Index of Prov- incial Operating Grants per FTE University Student	Index of Prov- incial Support per Elementary and Secondary Pupil ⁽¹⁾	Index of Prov- incial Support per Pupil, exclud- ing Teachers' Superannuation
1970-71	100.0	100.0	100.0
1971-72	100.0	116.3	116.7
1972-73	94.0	124.6	127.8
1973-74	87.9	124.8	126.0
1974-75	84.8	128.0	120.9
1975-76	85.1	129.6	130.7
1976-77	90.6	137.7	133.7
1977-78	93.6	152.1	137.8
1978-79	94.0	145.8	135.9
1979-80	89.6	146.4	136.9
1980-81	83.2	150.1	144.9

(1) Provincial Grants to schools include the provincial contribution to the Teachers' Superannuation Fund.

Note: Indexes are in constant 1970-71 dollars, deflated by the January CPI for each year.

Sources: Ministry of Colleges and Universities
Ministry of Education

TABLE 5

Comparison of Revenue per Student in Universities and in Elementary
and Secondary Schools in Ontario in Constant 1970-71 Dollars,
1970-71 = 100.0, 1970-71 to 1980-81

	<u>Index of Provincial Operating Grants Plus Tuition Fees per FTE University Student</u>	<u>Index of Provincial Grants plus Local Tax Revenue per Elementary and Second- ary School Pupil⁽¹⁾</u>	<u>Index of Provincial Grants plus Local Tax Revenue per Pupil, excluding Teachers' Superannuation</u>
1970-71	100.0	100.0	100.0
1971-72	98.3	105.5	105.3
1972-73	95.6	108.0	108.8
1973-74	89.8	106.9	106.7
1974-75	85.4	109.1	104.6
1975-76	84.3	113.4	113.2
1976-77	88.0	127.4	124.8
1977-78	91.8	137.5	129.5
1978-79	91.3	135.5	130.1
1979-80	87.3	138.0	132.9
1980-81	81.8	140.4	137.3

(1) Provincial grants to schools include the provincial contribution to the Teachers' Superannuation Fund.

Note: Indexes are in constant 1970-71 dollars, deflated by the January CPI for each year.

Sources: Ministry of Colleges and Universities
Ministry of Education

Full-Time and Part-Time FTE Undergraduate Enrolment by Discipline Sector, 1973-74 to 1980-81

		1973-74			1974-75		1975-76		1976-77		1977-78		1978-79		1979-80		1980-81		% change 1973-74 to 1980-81
		number	% share of total		number	% share of total	number	% share of total	number	% share of total	number	% share of total	number	% share of total	number	% share of total	number	% share of total	
Education	FT	8,433	7.3	9,540	11,035	11,638	10,718	10,007	11,638	10,718	10,007	9,187	9,581	9,187	9,581	6.7	13.6		
	PT	129	1.1	183	233	239	359	586	239	359	586	1,404	2,082	1,404	2,082	15.0	1,514.0		
Physical Education (2)	FT	4,862	4.2	5,302	5,521	5,720	5,632	5,585	5,720	5,632	5,585	5,428	5,447	5,428	5,447	3.8	12.0		
	PT	39	0.3	71	97	69	75	86	69	75	86	113	75	113	75	0.5	92.3		
Fine and Applied Arts	FT	4,734	4.1	5,103	5,277	5,516	6,608	6,566	5,516	6,608	6,566	6,255	6,542	6,255	6,542	4.6	38.2		
	PT	203	1.7	241	271	250	557	628	250	557	628	770	760	770	760	5.5	274.4		
Humanities & Related	FT	11,130	9.6	11,508	11,668	12,312	11,602	10,255	12,312	11,602	10,255	10,329	9,872	10,329	9,872	7.0	(11.3)		
	PT	1,164	9.9	1,285	1,397	1,352	1,430	1,327	1,352	1,430	1,327	1,216	1,228	1,216	1,228	8.9	5.5		
Social Science and Related	FT	26,638	22.9	28,583	32,525	33,974	34,495	34,675	33,974	34,495	34,675	33,836	35,960	33,836	35,960	25.4	35.0		
	PT	2,935	24.8	3,124	3,790	3,781	3,677	3,786	3,781	3,677	3,786	3,523	3,857	3,523	3,857	27.8	31.4		
Commerce and Business (2)	FT	6,991	6.0	7,954	8,501	9,324	9,786	10,568	9,324	9,786	10,568	10,839	12,686	10,839	12,686	8.9	81.5		
	PT	523	4.4	648	833	892	902	1,049	892	902	1,049	1,115	1,262	1,115	1,262	9.1	141.3		
Agriculture & Biological Science	FT	8,356	7.2	9,232	9,256	9,430	9,180	8,789	9,430	9,180	8,789	7,934	7,678	7,934	7,678	5.4	(8.1)		
	PT	138	1.2	177	205	183	168	164	183	168	164	162	157	162	157	1.1	13.8		
Engineering & Applied	FT	12,614	10.8	13,414	14,435	15,566	15,947	16,466	15,566	15,947	16,466	16,941	17,396	16,941	17,396	12.3	37.9		
	PT	180	1.5	239	287	292	283	312	292	283	312	329	364	329	364	2.6	102.2		
Engineering & Engineering Sci. (2)	FT	10,796	9.3	11,388	12,260	13,195	13,594	14,090	13,195	13,594	14,090	14,710	15,085	14,710	15,085	10.6	39.7		
	PT	168	1.4	218	257	249	236	258	249	236	258	281	301	281	301	2.2	79.2		
Health Professions & Occupations	FT	7,118	6.1	7,827	8,275	8,819	9,733	9,892	8,819	9,733	9,892	10,416	10,346	10,416	10,346	7.3	45.3		
	PT	81	0.7	89	128	140	166	169	140	166	169	161	165	161	165	1.2	103.7		
Mathematics & Physical Sciences	FT	6,961	6.0	7,731	8,020	8,203	8,285	8,285	8,203	8,285	8,285	7,875	8,792	7,875	8,792	6.2	26.3		
	PT	337	2.8	333	336	324	323	346	324	323	346	375	417	375	417	3.0	23.7		
General Arts & Science	FT	30,278	26.0	27,743	26,652	33,384	31,531	30,430	33,384	31,531	30,430	33,986	35,614	33,986	35,614	25.1	17.6		
	PT	6,665	56.3	5,874	6,023	5,620	5,355	4,933	5,620	5,355	4,933	5,082	4,846	5,082	4,846	34.9	(27.3)		
Total (3)	FT	116,262	100.0	120,681	127,143	138,842	138,099	135,365	138,842	138,099	135,365	136,759	141,781	136,759	141,781	100.0	21.9		
	PT	11,832	100.0	11,545	12,670	12,181	12,323	12,251	12,181	12,323	12,251	13,082	13,876	13,082	13,876	100.0	17.3		
Not Applicable & Not Reported	FT	6,208		9,931	10,773	4,961	4,610	3,632	4,961	4,610	3,632	2,912	3,196	2,912	3,196				
	PT	3,271		4,727	4,865	4,962	6,794	7,249	4,962	6,794	7,249	7,807	7,968	7,807	7,968				
TOTAL FTE		137,573		146,884	155,451	160,946	161,826	151,497	160,946	161,826	151,497	160,560	166,821	160,560	166,821		21.3		

(1) The universities' part-time education enrolment increased rapidly when the universities assumed responsibility for courses previously operated by the Ministry of Education.

(2) These enrolment figures are included in the sector totals immediately above.

(3) These figures do not include "Not Applicable" and "Not Reported" student numbers.

TABLE 7

Full-Time and Part-Time FTE Graduate Enrolment by Discipline Sector, 1973-74 to 1980-81

		1973-74		1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	number	1980-81 % share of total	% change 1973-74 to 1980-81
		number	% share of total									
Education	FT	1,071	6.8	803	898	1,054	1,040	1,031	1,103	1,158	7.7	8.1
Physical (1)	PT	761	27.3	830	924	1,052	1,030	991	998	983	29.6	29.2
Education	FT	66	0.4	98	117	128	144	147	182	213	1.4	222.7
	PT	19	0.7	14	13	21	21	23	26	23	0.7	(21.1)
Fine & Applied Arts	FT	206	1.3	190	193	199	253	246	256	300	2.0	45.6
	PT	14	0.5	18	21	24	23	25	27	26	0.8	85.7
Humanities & Related	FT	3,129	19.8	3,180	3,136	3,138	3,274	3,244	2,807	2,743	18.1	(12.3)
	PT	470	17.2	447	457	472	521	548	482	439	13.2	(6.6)
Social Sciences & Related	FT	5,395	34.2	5,484	5,987	6,091	5,990	5,980	5,797	5,869	38.7	8.8
	PT	971	35.5	1,026	1,158	1,195	1,188	1,163	1,194	1,258	37.8	29.6
Commerce & Business Related (1)	FT	1,443	9.1	1,352	1,551	1,615	1,622	1,666	1,786	1,895	12.5	31.3
	PT	491	18.0	462	566	605	568	569	605	660	19.8	34.4
Agricultural & Biological Sciences	FT	806	5.1	606	671	1,091	1,066	1,029	1,080	1,157	7.6	43.5
	PT	56	2.1	43	46	56	60	55	57	64	1.9	14.3
Engineering & Applied Sciences	FT	1,409	8.9	1,473	1,540	1,597	1,500	1,392	1,426	1,521	10.0	7.9
	PT	290	10.6	330	372	325	313	293	317	313	9.4	7.9
Engineering & Engineering Sci. (1)	FT	1,376	8.7	1,429	1,495	1,522	1,433	1,324	1,356	1,443	9.5	4.9
	PT	283	10.4	325	365	317	304	286	312	309	9.3	9.2
Health Professions & Occupations	FT	2,078	13.2	1,941	1,895	1,704	751	852	925	932	6.2	(55.1)
	PT	46	1.7	45	46	89	97	99	114	106	3.2	130.4
Mathematics & Physical Sciences	FT	1,688	10.7	1,628	1,760	1,798	1,636	1,518	1,416	1,470	9.7	(12.9)
	PT	125	4.6	145	142	127	134	141	135	136	4.1	8.8
Total (2)	FT	15,782	100.0	15,305	16,080	16,672	15,510	15,292	14,810	15,150	100.0	(4.0)
	PT	2,733	100.0	2,884	3,166	3,340	3,366	3,315	3,324	3,325	100.0	21.7
Not Applicable & Not Reported	FT	500		1,216	1,569	481	147	129	142	118		
	PT	135		189	225	184	158	155	135	131		
TOTAL FTE		19,150		19,594	21,040	20,677	19,181	18,891	18,411	18,724		(2.2)

(1) These enrolment figures are included in the sector totals immediately above.

(2) These figures do not include "Not Applicable" and "Not Reported" student numbers.

Source: USIS 110100113 and 110100114.

TABLE 8

Academic Staff Complements, 1977-78 to 1980-81⁽¹⁾

	<u>1977-78</u>	<u>1978-79</u>	<u>1979-80</u>	<u>1980-81</u>
Full-Time Tenure Stream	9,808	9,926	9,795	9,838
Full-Time Limited Term	1,643	1,584	1,584	1,522
FTE of Part-Time	1,815.9	1,751.3	1,666.6	1,691.4
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL FTE	13,266.9	13,261.3	13,045.6	13,051.4

(1) Data were not available for: Algoma, Nipissing, Hearst and Dominican College, the Ontario College of Art and the church-related affiliates of the provincially assisted universities. Full-time faculty is reported as of October 1st of each year.

Source: Council of Ontario Universities.

TABLE 9

Equipment and Furniture Expenditures from Operating Income (\$000)
1976-77 to 1979-80

	1976-77	1977-78	1978-79	1979-80	1980-81
Brock	271	238	206	321	316
Carleton	1,023	1,209	1,230	976	1,068
Guelph	1,633	1,482	1,812	2,109	1,886
Lakehead	291	355	346	430	762
Laurentian	188	307	312	252	194
Nipissing	63	33	26	20	28
Hearst	68	17	19	25	3
McMaster	1,414	1,718	2,035	1,371	1,381
Ottawa	1,301	1,395	1,563	2,214	2,652
Queen's	1,574	803	1,182	1,474	1,608
Toronto	4,704	5,814	7,003	5,964	6,975
Trent	160	138	118	111	112
Waterloo	2,432	3,099	2,255	2,720	2,593
Western	3,138	3,336	3,283	3,409	4,450
WLU	574	556	565	522	501
Windsor	1,064	1,010	975	1,241	1,470
York	1,210	948	1,439	1,759	1,389
Ryerson	2,057	1,941	956	1,176	618
OISE	251	260	349	221	135
TOTAL	23,416	24,686	25,674	26,315	28,141
(constant 1976-77 \$s)	(23,416)	(22,041)	(20,655)	(19,250)	(17,936)

- Notes: 1. Excludes Algoma College since data were not available for 1976-77.
2. The price deflator used for calculating constant dollar values for 1977-78 to 1979-80 was the Equipment, Computer and Furniture component of the Ontario Universities' Non-Salary Price Index. The price deflator used for 1980-81 was Council's estimate of the value of the total Ontario Universities' Non-Salary Price Index. The percentage increases in the Equipment, Computer and Furniture component of the index were quite similar to those experienced by the total index in the first four years of the table.

Source: COFO-UO Financial Reports for 1976-77, 1977-78, 1978-79 and 1979-80. Anticipated final expenditures obtained from the universities for 1980-81.

TABLE 10

Expenditures on Library Acquisitions from Operating Income, 1972-73 to 1980-81
(\$000's constant 1972-73)

	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Brock	213	214	252	264	219	208	184	173	146
Carleton	824	847	866	650	681	685	548	494	389
Guelph	565	608	635	505	635	550	541	378	515
Lakehead	287	296	263	236	257	258	203	195	171
Laurentian	300	254	246	218	200	192	167	143	124
McMaster	830	915	974	860	1,016	894	902	872	784
Ottawa	1,378	1,210	1,048	844	762	704	654	642	653
Queen's	1,001	817	868	716	709	612	581	658	596
Toronto	2,222	2,209	1,902	1,853	1,693	1,653	1,633	1,654	1,635
Trent	235	195	252	241	235	230	177	178	144
Waterloo	933	987	997	766	762	794	735	698	634
Western	1,352	1,029	1,097	1,108	1,246	956	965	923	894
Wilfrid Laurier	235	273	436	365	361	345	307	260	250
Windsor	605	675	756	635	693	602	505	478	430
York	1,320	1,187	998	934	819	741	699	725	662
Ryerson	250	278	337	77	227	198	130	155	153
OISE	128	125	116	90	79	80	77	71	62
TOTAL	12,678	12,119	12,043	10,362	10,594	9,702	9,008	8,697	8,242

Note: The price deflator used for calculating constant dollar values for 1972-73 to 1979-80 was the Books and Periodicals component of the Ontario Universities' Non-Salary Price Index. The price deflator used for 1980-81 was estimated by Queen's University at Council's request.

Source: Council of Ontario Universities for the years 1972-73 to 1977-78.
COFO-UO Financial Reports for 1978-79 and 1979-80.
Anticipated final expenditures obtained from the universities for 1980-81.

TABLE 11

Historical Summary

Capital Funding for Universities, Ryerson, OCA, 1944-64 to 1981-82
(\\$000)

	<u>OUCAC Debentures</u> ⁽⁴⁾	<u>Capital Grants</u>	<u>Minor Repairs & Maintenance</u>	<u>Health⁽²⁾ Sciences</u>	<u>Min.of Energy</u>	<u>Wintario Grants⁽³⁾</u>	<u>Total</u>
1944-64		83,448					83,448
1964-65	45,600						45,600
1965-66	89,239						89,239
1966-67	93,105						93,105
1967-68	99,995						99,995
1968-69	132,974						132,974
1969-70	101,619			7,634			109,253
1970-71	111,760			28,045			139,805
1971-72	114,739			21,308			136,047
1972-73	89,162			9,550			98,712
1973-74	46,254			8,238			54,492
1974-75	17,398			4,244			21,642
1975-76	16,236		2,746	4,176	435		23,593
1976-77	11,190		4,086	5,330	115	985	21,706
1977-78	18,250		5,800 ⁽¹⁾	7,693	146		31,889
1978-79		15,247		2,076	178		17,501
1979-80		13,445		5,107	45	930	19,527
1980-81		13,500		4,924	50	2,170	20,644
1981-82		13,500		5,500+	-		19,000
TOTAL	1,126,661		12,632	113,825	969	4,085	1,258,172

(1) Amount added to operating grant base in 1979-80.

(2) Excludes bridge financing grants, but includes \$804,000 for biohazard containment in 1979-80.

(3) Amounts committed in the year shown.

(4) Capital projects funded by debentures issued by the Government of Ontario.

Source: Ministry of Colleges and Universities

Annual OCUA Recommendation for New Capital Funding for Major Repairs, Renovations and Replacement Projects
and Government Allocation of Capital Grants, 1976-77 to 1981-82 (\$000)

	<u>1976-77</u>	<u>1977-78</u>	<u>1978-79</u>	<u>1979-80</u>	<u>1980-81</u>	<u>1981-82</u>
(A) GRANTS FOR WHICH OCUA MAKES RECOMMENDATIONS:						
OCUA Recommendation for Funding of New Major Repairs, Renovations and Replacement Projects (Excluding Carry-Overs and New Construction)	11,800.0	14,100.0	14,500.0	17,900.0	19,100.0	21,200.0
(B) GOVERNMENT GRANTS IN RESPONSE TO THE OCUA RECOMMENDATIONS:						
1. Major Renovations and Repairs						
New Starts	6,182.0	6,533.8	5,326.0	850.0	4,661.9	6,305.0
(Shortfall in Government New Capital Funding for Major Repairs and Renovations)	(5,618.0)	(7,566.2)	(9,174.0)	(17,050.0)	(14,438.1)	(14,895.0)
(C) GOVERNMENT GRANTS FOR WHICH OCUA DOES NOT MAKE RECOMMENDATIONS:						
1. Major Renovations and Repairs (continued)						
Carry-Overs	2,523.4	4,865.0	2,499.1	10,451.1	7,072.1	5,464.5
2. New Construction						
New Starts	2,208.0	411.7	2,118.0	-	50.0	-
Carry-Overs	-	5,769.5	5,303.5	2,198.9	1,716.0	1,730.5
TOTAL	<u>2,208.0</u>	<u>6,181.2</u>	<u>7,421.5</u>	<u>2,198.9</u>	<u>1,766.0</u>	<u>1,730.5</u>
3. Land Purchases						
New Starts	-	609.0	-	-	-	-
Carry-Overs	276.6	-	-	-	-	-
TOTAL	<u>276.6</u>	<u>609.0</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
TOTAL GOVERNMENT CAPITAL GRANTS ⁽¹⁾	<u>11,190.0</u>	<u>13,189.0</u>	<u>15,246.6</u>	<u>13,500.0</u>	<u>13,500.0</u>	<u>13,500.0</u>

(1) Sum of "New Starts" in Section (B) and "Carry-Overs" in Section (C).

TABLE 13

Formula Operating Grants
(\$000)

	Base Years (1974-77)	1977-78 (Actual)	1978-79 (Actual)	1979-80 (Actual)	1980-81 (Actual)	1981-82 (Interim)	Total (1977-82)
Brock	25,754	11,130	11,957	12,591	13,390	14,852	63,920
Carleton	84,806	36,063	38,353	39,786	42,255	45,942	202,399
Guelph	101,853	42,956	46,116	48,218	51,244	55,553	244,087
Lakehead	24,615	10,212	11,017	11,765	12,474	13,579	59,047
Laurentian	22,680	9,815	10,539	11,152	12,022	13,004	56,532
Algoma	2,722	1,014	1,043	1,061	1,065	1,098	5,281
Nipissing	2,696	1,393	1,585	1,644	1,698	1,840	8,160
Hearst	731	278	274	283	289	301	1,425
McMaster	112,241	47,135	50,566	52,468	56,116	60,878	267,163
Ottawa	126,454	52,926	56,687	59,501	64,433	71,213	304,760
Queen's	113,624	47,027	50,464	53,599	57,799	63,217	272,106
Toronto	379,085	153,437	163,063	171,833	185,825	205,656	879,814
Trent	15,413	6,736	7,349	7,701	8,216	8,844	38,846
Waterloo	125,873	52,763	56,641	59,681	63,898	70,175	303,158
Western	171,875	70,721	75,117	78,939	84,311	92,742	401,830
Wilfrid Laurier	28,909	12,263	13,276	14,067	15,274	17,134	72,014
Windsor	68,972	30,662	33,292	34,195	35,327	38,802	172,278
York	127,938	53,380	56,776	59,205	62,883	70,000	302,244
Ryerson	65,698	27,422	31,034	32,896	36,724	40,422	168,498
OISE	23,246	9,831	10,406	11,275	12,215	13,357	57,084
OCA	8,568	3,840	4,295	4,679	5,140	5,676	23,630
TOTAL	1,634,753	681,004	729,850	766,539	822,598	904,285	3,904,276

Source: Ministry of Colleges and Universities

Enrolment Driven Funding: Difference Between Actual Grants and Hypothetical Grants
Based on Slip-Year Formula Basis

	1977-78		1978-79		1979-80		1980-81		1981-82		TOTAL	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Brock	214	1.9	113	0.9	- 616	- 4.9	- 156	- 1.7	1,037	7.0	592	0.9
Carleton	- 34	- 0.1	- 762	- 2.0	- 983	- 2.5	-1,025	- 2.4	-2,910	- 6.3	-5,714	- 2.8
Guelph	171	0.4	977	2.1	-1,152	- 2.4	-1,409	- 2.7	-2,387	- 4.3	-3,800	- 1.6
Lakehead	174	1.7	725	6.6	132	1.1	- 712	- 5.7	- 314	- 2.3	5	0.0
Laurentian	126	1.3	- 4	- 0.0	216	1.9	- 48	- 0.4	- 885	- 6.8	- 595	1.1
Algoma	- 139	-13.7	- 120	-11.5	- 226	-21.3	- 319	-30.0	- 121	-11.2	- 925	-17.5
Nipissing	231	16.6	141	8.9	- 286	-17.4	- 47	- 2.8	525	28.5	564	6.9
Hearst	- 40	-14.4	- 82	-29.9	- 10	- 3.5	- 92	-31.8	- 137	-45.5	- 361	-25.3
McMaster	- 578	- 1.2	- 577	- 1.1	- 511	- 1.0	-1,716	- 3.1	-3,349	- 5.5	-6,731	- 2.5
Ottawa	103	0.2	- 832	- 1.5	1,428	2.4	2,728	4.2	1,045	1.5	4,472	1.5
Queen's	589	1.3	1,389	2.8	732	1.4	847	1.5	792	1.3	4,349	1.6
Toronto	- 2,520	- 1.6	-2,655	- 1.6	3,708	2.2	3,920	2.1	198	0.1	2,651	0.3
Trent	143	2.1	407	5.5	- 111	- 1.4	- 172	- 2.1	- 239	- 2.7	28	0.1
Waterloo	813	1.5	566	1.0	169	0.3	55	0.1	- 955	- 1.1	648	0.2
Western	- 984	- 1.4	- 212	- 0.3	-1,868	- 2.4	-1,917	- 2.3	1,450	1.6	-3,531	-0.9
Wilfrid Laurier	105	0.9	419	3.2	587	4.7	1,043	6.8	1,806	10.5	3,960	5.5
Windsor	1,595	5.2	786	2.4	-2,794	- 8.2	-2,644	- 7.5	-1,988	- 5.1	-5,045	- 2.9
York	251	0.5	-1,134	- 2.0	-1,641	- 2.8	- 536	- 0.9	2,211	3.2	- 849	- 0.3
Ryerson	- 1,161	- 4.3	- 926	- 3.0	1,487	4.5	279	0.8	2,203	5.5	1,881	1.1
OISE	521	5.3	1,265	12.7	1,237	11.0	1,213	9.9	1,395	10.4	5,631	9.9
OCA	420	10.9	516	12.0	502	10.7	708	13.8	623	11.0	2,769	11.7

Notes: 1. Percentage figures represent the values above or below (-) actual grants as a percentage of actual grants.

2. Positive figures imply that the institution would have received a greater level of grants under this slip-year enrolment driven formula that the institution actually received.

3. The 1981-82 calculations do not take into account foreign fee adjustments.

TABLE 15

Fixed Share Funding: Difference Between Actual Grants and Hypothetical Fixed Share Funding Based on Percentage Share of Base Years' Grants

(\$000)

	1977-78		1978-79		1979-80		1980-81		1981-82		TOTAL	
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Brock	- 404	- 3.6	- 462	- 3.9	- 518	- 4.1	- 434	- 3.2	- 610	- 4.1	-2,427	- 3.8
Carleton	- 733	- 2.0	- 488	- 1.3	- 18	- 0.0	421	1.0	972	2.1	154	0.1
Guelph	- 529	- 1.2	- 646	- 1.4	- 463	- 1.0	4	0.0	784	1.4	- 850	- 0.3
Lakehead	44	0.4	- 25	- 0.2	- 221	- 1.9	- 86	- 0.7	40	0.3	- 248	- 0.4
Laurentian	- 370	- 3.8	- 416	- 3.9	- 520	- 4.7	- 612	- 5.1	- 462	- 3.6	-2,380	- 4.2
Algoma	123	12.1	176	16.9	219	20.6	309	29.0	412	37.5	1,239	23.5
Nipissing	- 269	-19.3	- 381	-24.0	- 379	-23.1	- 341	-20.1	- 348	-18.9	-1,718	-21.1
Hearst	28	10.1	54	19.7	62	21.9	81	28.0	160	35.2	331	23.2
McMaster	- 377	- 0.8	- 454	- 0.9	163	0.3	364	0.6	1,210	2.0	906	0.3
Ottawa	- 250	- 0.5	- 233	- 0.4	- 209	- 0.4	- 805	- 1.2	-1,267	- 1.8	-2,764	- 0.9
Queen's	310	0.7	268	0.5	- 317	- 0.6	- 620	- 1.1	- 360	- 0.6	- 719	- 0.3
Toronto	4,481	2.9	6,182	3.8	5,920	3.4	4,927	2.7	4,039	2.0	25,549	2.9
Trent	- 314	- 4.7	- 467	- 6.4	- 472	- 6.1	- 459	- 5.6	- 317	- 3.6	-2,029	- 5.2
Waterloo	90	0.2	3	0.0	- 190	- 0.3	- 56	- 0.1	7	0.0	- 146	- 0.0
Western	880	1.2	1,619	2.1	1,655	2.1	2,177	2.6	2,335	2.5	8,666	2.2
Wilfrid Laurier	- 223	1.8	- 372	- 2.8	- 515	- 3.7	- 730	- 4.8	-1,146	- 6.7	-2,986	- 4.0
Windsor	-1,930	- 6.3	-2,500	- 7.5	-1,855	- 5.4	- 622	- 1.8	- 650	- 1.7	-7,557	- 4.4
York	- 85	- 0.2	342	0.6	784	1.3	1,494	2.4	769	1.1	3,304	1.1
Ryerson	- 53	- 0.2	-1,701	- 5.5	-2,089	- 6.4	-3,664	-10.0	-4,079	10.1	-11,586	- 6.9
OISE	- 147	- 1.5	- 28	- 0.3	- 375	- 3.3	- 518	- 4.2	- 498	- 3.7	-1,566	- 2.7
OCA	- 272	- 7.1	- 471	-11.0	- 662	-14.1	- 830	-16.1	- 938	16.5	-3,173	-13.4

Notes: 1. Percentage figures represent the values above or below (-) actual grants as a percentage of actual grants.

2. Positive figures imply that the institution would have received a greater level of grants under this fixed share funding scheme than the institution actually received.

